UNCRATING/INSTALLATION INSTRUCTIONS

AMSCO® RELIANCE® 444 HTM
SINGLE-CHAMBER WASHER/DISINFECTOR

(02/28/02)
Rev. 0

P-920012-041

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A WORD FROM STERIS CORPORATION

Follow each step of the uncrating/installation instructions **in the order presented**. Open the carton carefully to avoid damage to the equipment inside. If you find any indication of damage to the equipment (no matter how slight), show it to your supervisor.

To properly install this unit, you will need the Equipment Drawings (previously furnished), showing all utility service and space requirements. If drawings cannot be located, replacement copies may be obtained by writing, faxing, or telephoning STERIS, giving the serial and model numbers of your equipment.

Once installed, equipment operation should be tested by a qualified service technician prior to your usage of the equipment.

If STERIS supervision is desired, for installing and starting up this equipment, contact your local STERIS representative.

Indications for Use

The **Amsco® Reliance® 444 HTM Single-Chamber Washer/ Disinfector** is indicated for use in the cleaning and low-level disinfection of reusable utensils, trays, glassware, bedpans and urinals, rubber and plastic goods, simple hard-surfaced rigid surgical instruments, such as forceps and clamps, and other similar and related articles found in healthcare facilities.

Advisory

IMPORTANT: A listing of Safety Warnings and Cautions to be observed when uncrating, installing, and operating this washer can be found on Page 1-1 of these instructions. Do not begin uncrating/ installing this equipment until you have become familiar with this information.

IMPORTANT: Be sure to check local occupational health and safety regulations, as well as electric and plumbing codes, for any special requirements that may pertain to the installation of this unit.

Any alteration of the equipment not authorized by STERIS Engineering Service which could affect its operation will void the warranty, could adversely affect washing efficacy, could violate federal, state, and local regulations, and could jeopardize your insurance coverage.

STERIS supervision is recommended for installing and starting up this equipment. Contact the STERIS Regional Office nearest you for availability information on this service.

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Service Information

A thorough preventive maintenance program is essential to safe and proper operation of this equipment. You are encouraged to contact your STERIS representative concerning extended service maintenance agreements to give your washer planned maintenance, assuring equipment performance according to factory specifications.

A global network of skilled service specialists can provide periodic inspections and adjustments to assure low-cost peak performance. STERIS representatives can provide information regarding Annual Maintenance Agreements.

STERIS carries a complete line of accessories for use in this equipment. Your STERIS representative will gladly review these with you.

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Web Site: www.steris.com

Certification

CE 0123

This **Amsco® Reliance® 444 HTM Single-Chamber Washer/Disinfector** complies with the following regulations:

Governing Directive for the affixing of the CE mark:

Medical Device Directive (93/42/EEC), Annex II.

Standards applied to demonstrate conformity to the directives:

IEC-61010-1, IEC-61010-2-045, IEC-61326-1.

Compliant with the requirements mentioned in the guidance document HTM 2030.

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LISTING OF WARNINGS, CAUTIONS, AND SYMBOLS

1

The following is a listing of the safety precautions which must be observed when uncrating and installing equipment. **WARNING** indicates the potential for danger to personnel and **CAUTION** indicates the potential for damage to equipment. These precautions are repeated, where applicable, throughout the instructions.

WARNING - PERSONAL INJURY AND/OR EQUIPMENT DAMAGE HAZARD:

⚠ **When moving the unit, use a forklift. Do not use door(s) or door handle(s) for lifting.**

WARNING - LACERATION AND/OR EYE INJURY HAZARD:

⚠ **When removing bands, wear gloves and eye protection, and always use a tool specifically designed to cut the bands. The bands used to secure this carton can cause personal injury when cut and tension is released.**

WARNING - LACERATION HAZARD:

⚠ **When removing bolts, wear gloves to protect your hands.**

WARNING - PERSONAL INJURY HAZARD:

⚠ **The chamber door is heavy. Lifting it manually may require two people.**

⚠ **Door lifts at high speed; keep your head, hands, or fingers away from door opening.**

WARNING - BURN HAZARD:

⚠ **When checking the automatic stop feature, wear gloves and face protection and open chamber door slowly. Hot water/steam may be sprayed through door opening if door is opened during a cycle.**

⚠ **Except for emergency, do not open door when cycle is in progress. In an emergency, first stop cycle by pressing the STOP/RESET touch pad and wait for water flow to stop. Wear protective gloves and face shield whenever reaching into chamber.**

WARNING - FALL HAZARD:

⚠ **To prevent falls, keep floors dry. Promptly clean up any spills or drippage.**

WARNING - ELECTRICAL SHOCK HAZARD:

⚠ **Fasteners and star washers are used to ensure protective bonding continuity. Always reinstall any star washer which may have been removed during installation or servicing.**

(See next page for additional Warnings and Cautions)

WARNING - CHEMICAL BURN AND/OR EYE INJURY HAZARD:

Risk of explosion: Do not remove from pressurized lines. Do not exceed maximum temperature/ pressure specifications. Do not install/service without following installation instructions (see sensor manual). Wear safety goggles and face shield during installation/service. Do not alter product construction. Failure to follow safety instructions could result in severe personal injury.

WARNING - HEALTH HAZARD:

Vapors from solvents can be harmful. Use with adequate ventilation. Follow directions on the container.

CAUTION - POSSIBLE EQUIPMENT DAMAGE:

After utilities are connected to equipment, slowly remove the protective adhesive paper from the exterior cabinet panels to reduce the level of static discharge.

When removing adhesives from stainless steel, use a small amount of non-flammable cleaning solvent. Rub in a back-and-forth motion (in same direction as surface grain). Solvent rubbed in a circular motion or applied with a wire brush or steel wool on door and chamber assemblies can be harmful to stainless steel. Do not use solvents on painted surfaces.

Once three-phase power is connected, check pump for correct rotation (indicated by arrow on pump motor). Incorrect pump rotation may result in pump damage and improper cleaning action.

Before operating unit, always position each manifold or accessory header over a manifold connector. If manifolds or accessory headers are not positioned correctly, damage may result and unit will be unable to effectively wash loads.

Symbols

Symbol	Definition
Symbols on the carte	
	Tip'N Tell Indicator "If TIP'N TELL arrow point is blue, this package has been on its side or tipped over in transit. Make note on the bill of lading and check for damage. Any claims for dipping on this notation."
	Maximum Shipping and Storing Temperature
	Maximum Humidity Level
	This Side Up
	Do Not Stack
	Fragile
	Keep Dry
Information on the nameplate	
MODEL	Model number of the unit
S/N	Serial number of the unit
kVA	Kilovolt-Ampere
V_~	Volt, Number of phase (3 or 1 [blank]), Alternate Current
A	Ampere
YEAR	Year of manufacture of the unit
Hz	Hertz — Frequency of the unit

Symbols (continued)

Symbol	Definition
Symbols on the unit	
	Transfer of Heat, Hot Surface
	Protective Earth (Ground)
	Warning! Risk of Electrical Shock
	Electrostatic Sensitive Device
	Attention. Refer to Manual for Further Instructions
	Warning: Risk of explosion

UNCRATING INSTRUCTIONS

2

Open Crate

⚠ WARNING - PERSONAL INJURY AND/OR EQUIPMENT DAMAGE HAZARD: When moving the unit, use a forklift. Do not use door(s) or door handle(s) for lifting.

⚠ WARNING - LACERATION AND/OR EYE INJURY HAZARD: When removing bands, wear gloves and eye protection, and always use a tool specifically designed to cut the bands. The bands used to secure this carton can cause personal injury when cut and tension is released.

NOTE: Unit weighs approximately 1000 lbs (454 kg). Use a forklift to move the unit.

NOTE: Uncrate on level floor as close to installation site as possible.

NOTE: Operator Manual is enclosed in an envelope taped on the side of the unit. Make sure appropriate person receives Operator Manual.

1. Check Tip Indicator, located on upper left side of crate (see Figure 2-1). Tip Indicator contains a blue compound at the bottom of the indicator. If unit has been tipped, residue from the blue compound will be found higher up in the indicator.

   If unit has been tipped, contact your STERIS representative to determine if a service technician is required to inspect the equipment and determine if unit was damaged.

2. Position unit to open wooden crate from top and side. Provide a clear work area on all sides.
3. Carefully cut and remove bands from crate. Discard bands before continuing.
4. Remove and discard polythene wrap from crate.
5. Using a nail puller, remove and discard top wooden panel.
6. Using a nail puller, remove and discard side wooden panels.
7. Using a nail puller, remove and discard wooden crate frame.
8. Carefully remove barrier wall flanges and set aside.
9. Remove and discard shrink wrap and polystyrene wrap from unit.

NOTE: Do not remove protective adhesive paper from the exterior cabinet panels until after utilities are connected.

10. Open lower service access door and check tip indicator, located inside lower service compartment (see Figure 2-2). Tip'N Tell indicator contains a blue compound at the bottom of the indicator. If unit has been tipped, residue from the blue compound will be found higher up in the indicator.

    If unit has been tipped, contact your STERIS representative to determine if a service technician is required to inspect the equipment and determine if unit was damaged.

11. Close doors to the lower service access and chemical storage compartments.

NOTE: Do not open chamber door(s) until procedures in "Prepare Equipment for Installation," later in this section, are performed.

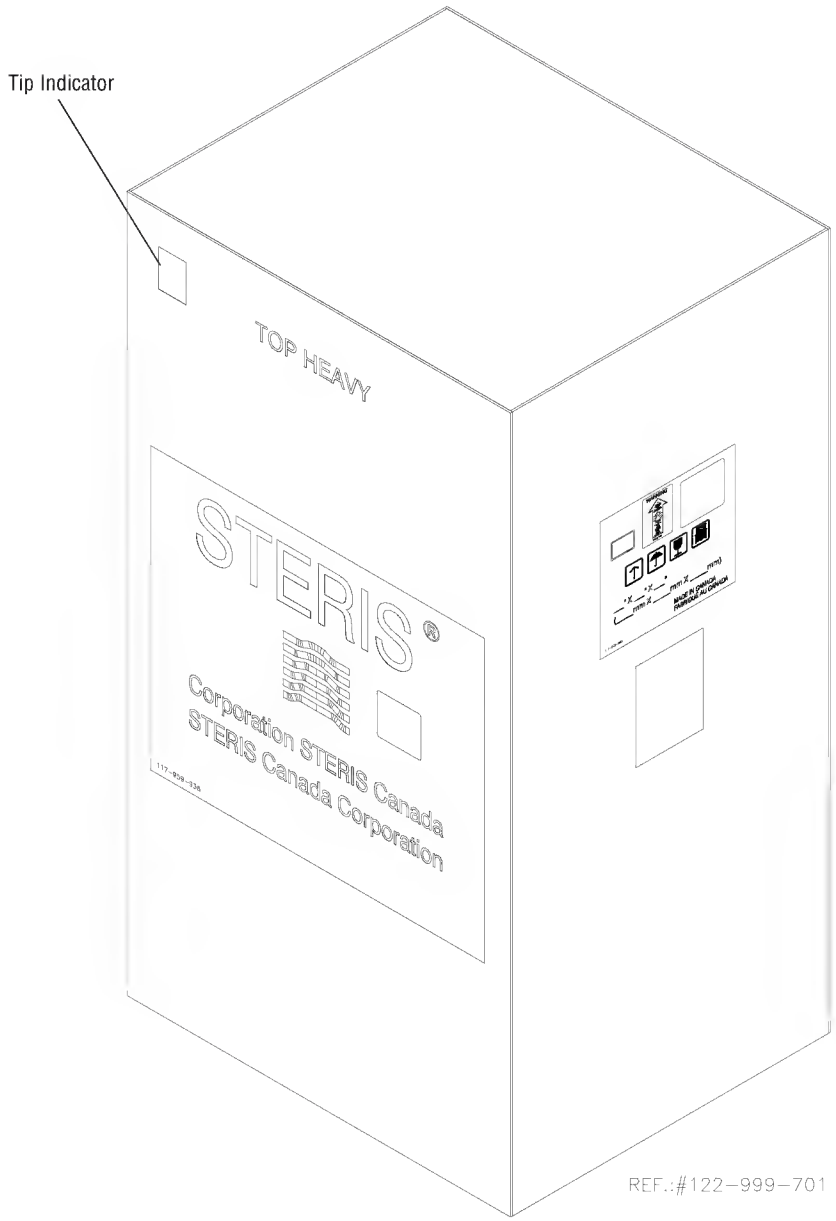

Figure 2-1. Crate

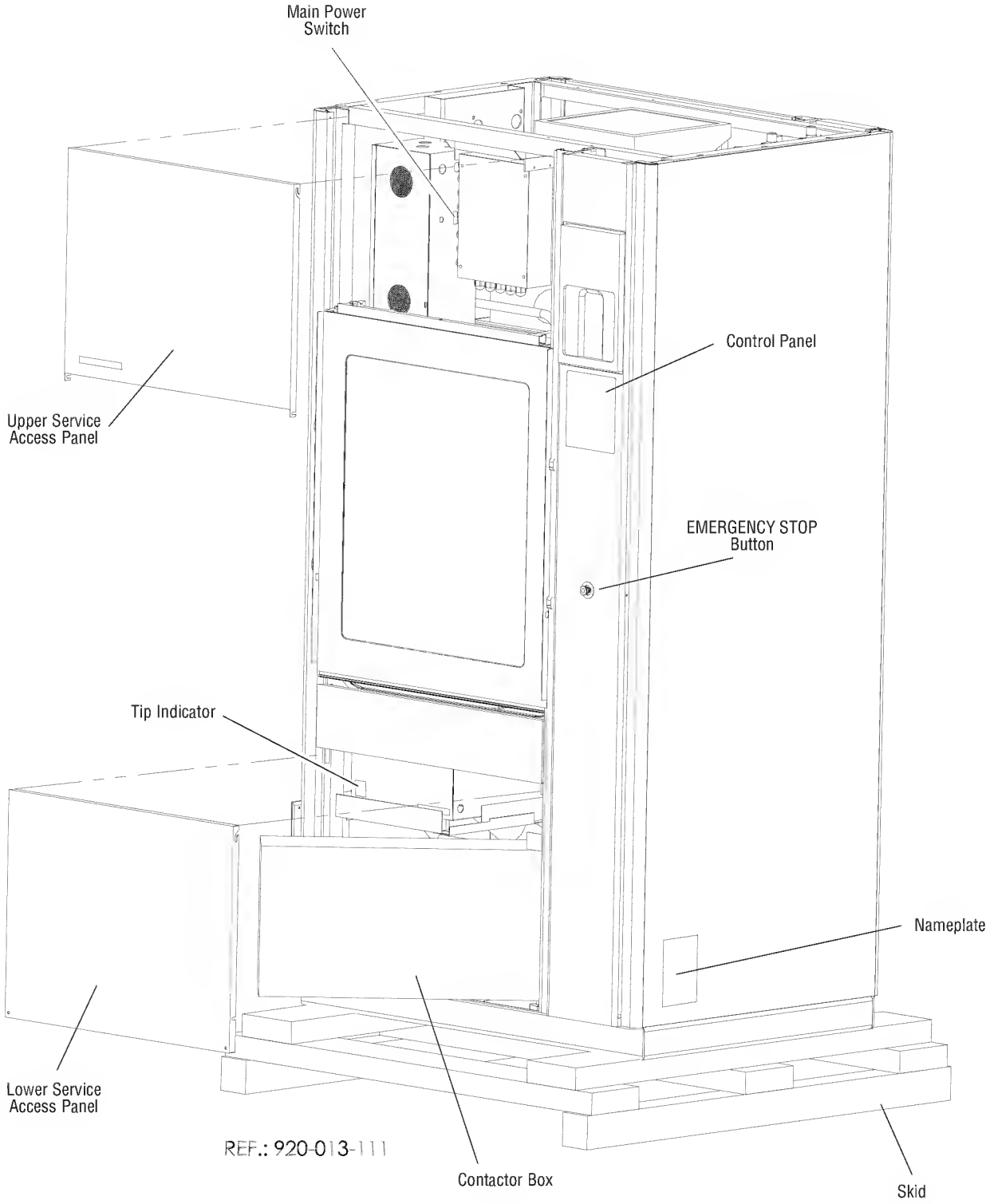

Figure 2-2.
Amsco® Reliance® 444 HTM Single-Chamber Glassware Washer/Disinfector

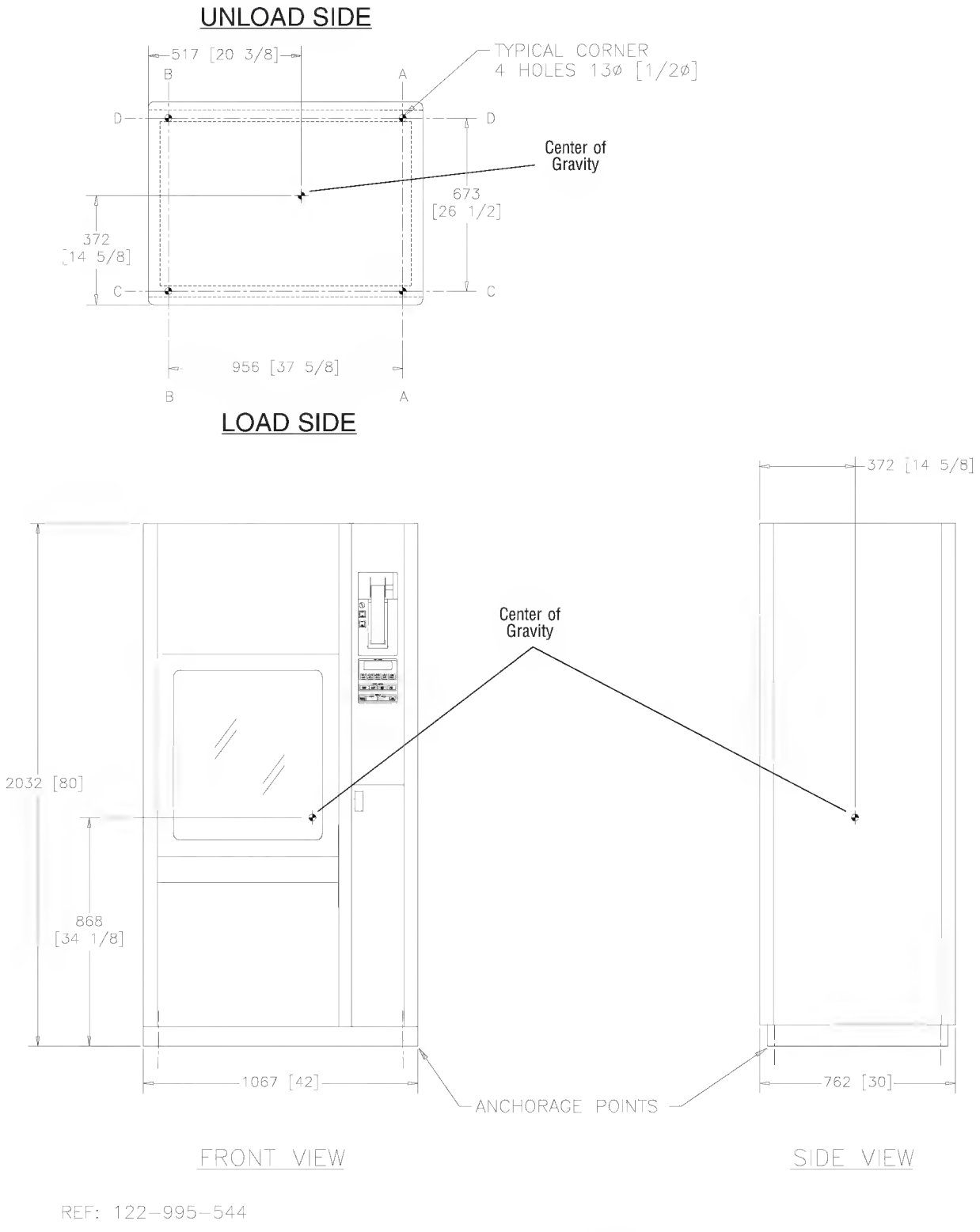

Figure 2-3. Center of Gravity

Move Equipment and Remove Skid

⚠ WARNING - PERSONAL INJURY AND/OR EQUIPMENT DAMAGE HAZARD: When moving the unit, use a forklift. Do not use door(s) or door handle(s) for lifting.

⚠ WARNING - LACERATION HAZARD: When removing bolts, wear gloves to protect your hands.

1. With unit still mounted on skid, use a forklift to move unit to installation site.

   If necessary, unit may be tilted extremely carefully on its left side to accommodate narrow conditions. Tilt equipment onto the side opposite of the control column. (See Figure 2-4. Also refer to Figure 2-3 for Center of Gravity.)

NOTE: At least four people are required to tilt unit. Unit is heavy and center of gravity is very high (see Figure 2-3).

2. Remove four lag bolts securing unit base to skid.

NOTE: The front right-hand side lag bolt is located under the chemical pumps compartment.

3. Remove and discard skid from under equipment. If necessary, use a piece of plywood as a small ramp to slide unit from skid to floor.

4. Position unit in final location. Use tubing as rollers and roll the unit into position.

NOTE: Floor under unit should be level. If necessary, use adjustable legs to level unit (see Figure 2-3 for Center of Gravity).

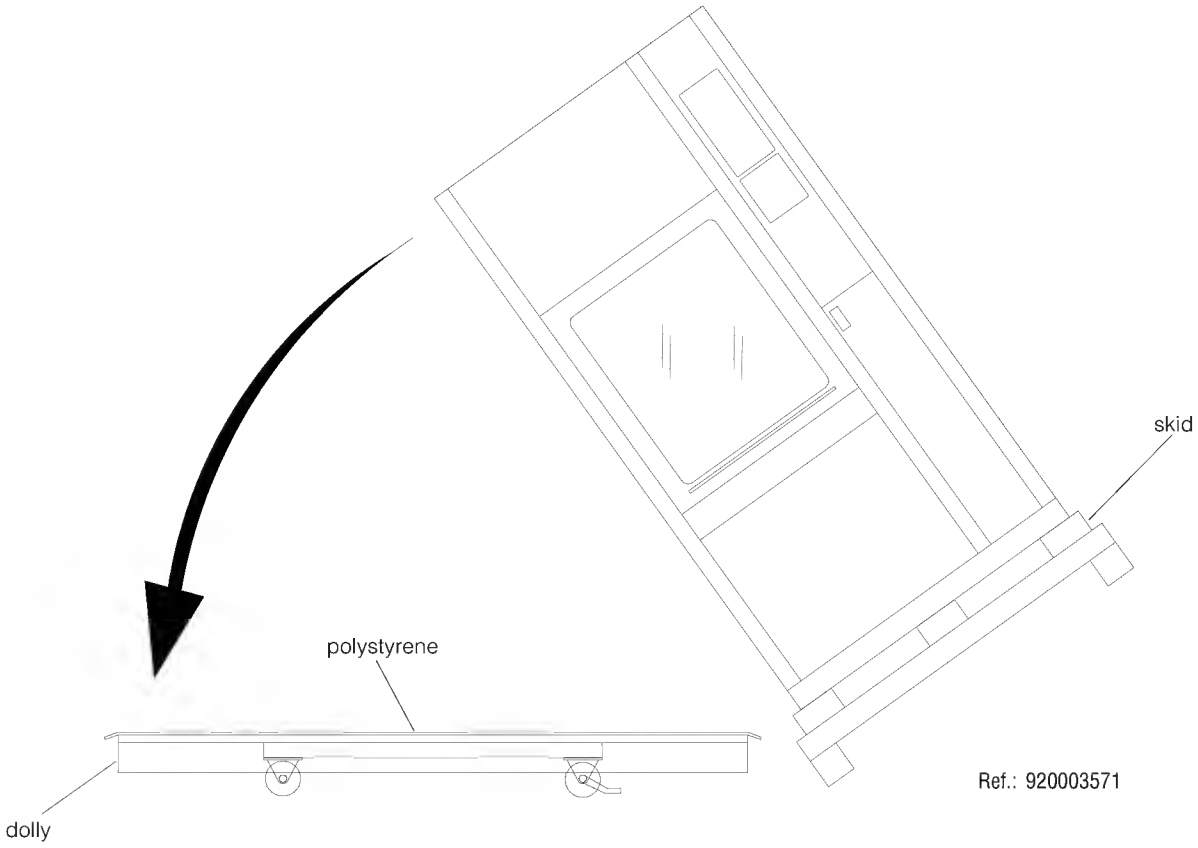

Figure 2-4. Tilt Equipment (only if necessary)

Prepare Unit for Installation

⚠ WARNING - ELECTRICAL SHOCK HAZARD: Fasteners and star washers are used to ensure protective bonding continuity. Always reinstall any star washer which may have been removed during installation or servicing.

NOTE: Do not remove protective adhesive paper from the exterior cabinet panels until after utilities are connected.

1. Untighten screws from bottom right and left-hand corners of the upper service access panel(s) (see Figure 2-5).
2. Remove the Upper Service Access Panel(s).
3. Remove light bulb from under HEPA filter and install on top of unit.

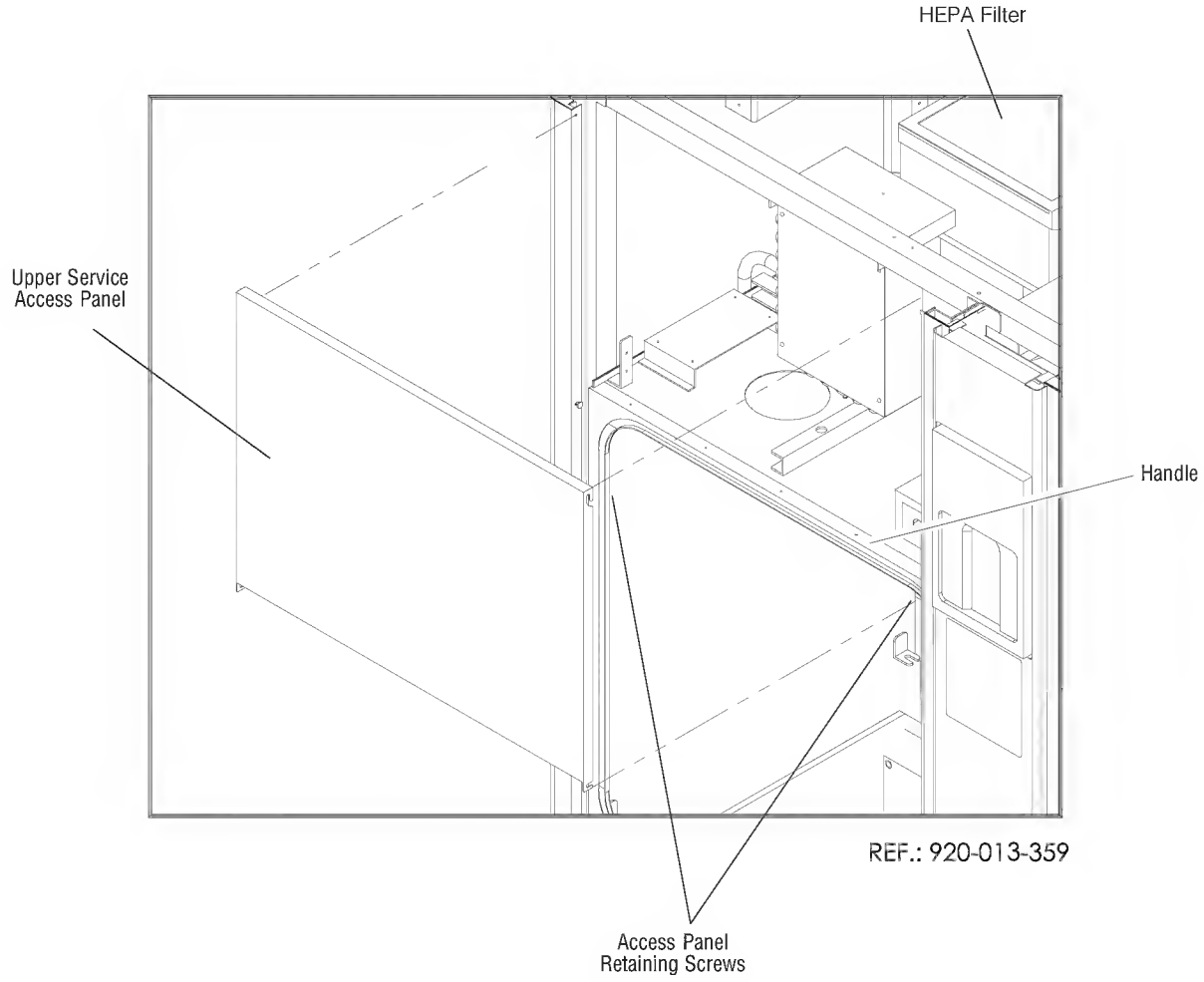

Figure 2-5. Remove Upper Service Panel

» Manual Opening of Door (without Electric and Air Supplies)

⚠ WARNING – PERSONAL INJURY HAZARD: The chamber door is heavy. Lifting it manually may require two people.

a. Use a flat screwdriver to pry into door side frame holes to lift side blocks.

b. Close air supply. On bottom of washer, in the service compartment, unplug the red hoses from both cylinders.

c. Climb a step ladder to lift door from door handle. A second person must help lifting door from bottom. Pull out when lifting door until complete opening. Door must lift without any resistance.

d. Remove the two safety pins on top of washer frame. Insert safety pins into door and frame, on both sides of door, to secure door into open position.

f. To manually close door, one person must hold the door and lift slightly from the bottom of the door while the other person removes both safety pins from the door. Replace safety pins into frame.

g. Lower door pulling it out slightly until door rests onto sill.

h. On bottom of washer, connect red hoses to cylinders. Door will close completely when electric supply and air will be restored.

» Manual Opening of Door (with Air Supply)

⚠ WARNING – PERSONAL INJURY HAZARD: Door lifts at high speed. Keep your head, hands or fingers away from door opening.

a. On load side, remove control side panel. Use a flat screw driver to turn air pilot valve AC12 (load door) or 1AC5 (unload door) to horizontal position. Once door is open, return air pilot valve to its initial position.

b. To close door, use a flat screw driver to turn air pilot valve AC1 (load door) or 1AC4 (unload door to horizontal position.) Once door is closed, return air pilot valve to its initial position.

6. Raise control console and secure in place with retaining screws.
7. Reconnect electrical connectors to bottom of control console and close control service panel door.
8. Discard all packing material removed during uncrating procedures.

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Technical Specifications

» Voltage, Amperage, and Power Consumption

The **Amsco® Reliance® 444 HTM Single-Chamber Washer/Disinfector** operates on:

- 380/400/415 V, 50 Hz, 3-phase, 4-wire

A protective ground conductor is required (Class 1 Equipment).

Maximum current and power consumptions are indicated on nameplate (see Figure 2-2).

» Permissible Environmental Conditions

This equipment is designed to give optimal results under the following conditions:

- Indoor use only;
- Altitude of operation up to 6562 ft (2000 m);
- Temperature 5°C (41°F) to 40°C (104°F);
- Maximum relative humidity is 80 percent for temperatures up to 31°C (88°F), decreasing linearly to 50 percent relative humidity at 40°C (104°F);
- Main supply voltage fluctuation not exceeding ± 10 percent of nominal voltage;
- Installation Category III (except for the control supply, Installation category is II);
- Pollution Degree 2.

» Noise Level

Equivalent Sound Pressure Level at work station (measured 36" [1 m] away from equipment and at 63" [1.6 m] from ground): 67.6 dB (A) (Results determined according to *ISO-3746: 1979 Standard: Acoustics Determination of Sound Power Levels of Noise Sources Survey Method*).

Installation Requirements

An Equipment Drawing, showing all utility and space requirements, was sent to you after the order for this equipment was received. The clearance space, specified on the Equipment Drawing is necessary for proper installation, operation, and maintenance of the unit. If this document is missing or misplaced, contact your STERIS representative, giving the serial, equipment, and model number of the unit. A replacement copy will be sent promptly.

NOTE: If it is necessary to relocate controls on the unit, a special kit is available. Contact STERIS technical support for further information.

1. Clearance - Clearance space shown on Equipment Drawing is necessary for easy installation and proper operation and maintenance of unit.
2. Barrier wall flange(s) installation - Refer to Equipment Drawing for installation.
3. Utility service lines:
   - To allow service on unit without shutting off building supply lines, shutoff valves (not by STERIS) should be installed on steam, air, and water lines to unit. Shutoff valves must be capable of being locked in OFF position only.
   - If unit is installed next to other equipment, shutoff valves and disconnect switches should be located so that service can be shut off to one piece of equipment at a time.
   - The disconnect device of the equipment must be within easy reach of the operator (preferably no more than 1 m away from equipment).
   - Utility service requirements are shown on Equipment Drawing.
4. Electricity
   - A disconnect switch meeting the requirements of EN-60947 (not by STERIS) should be installed in electric supply lines near unit. Check Equipment Drawing for required amperage.
   - Disconnect switches must be marked as the disconnecting device for the equipment and must be capable of being locked in **OFF** position only.
   - **If supply is 380 V or 400 V**, locate the 600 VA transformer, inside electrical supply box, disconnect brown wire from 250 V tap connection. Connect brown wire of primary side to 230 V tap connection.
   - Check Equipment Drawing or Nameplate (see Figure 2-2) for proper voltage and amperage.
   - Run HAR-approved supply cord (isolation 80°C minimum) from disconnect switch to unit electrical supply box. A European-approved type inlet bushing (strain relief) must be fitted to opening on electrical supply box to protect supply cord.
5. A protective conductor terminal (ground) is required (Class 1 Equipment).

IMPORTANT: A protective conductor connection is essential for the safe operation of the equipment. Check for presence of protective conductor at equipment terminal and verify if connection is well secured inside terminal with proper torque requirement.

- Torque requirement for supply conductor terminals:
  - Steam-heated units (L1-L2-L3- N): 0,8-1,0 N•m.
  - Electric-heated units (L1-L2-L3- N): 1,2-1,4 N•m.
- Protective conductor terminal:
  - 2,0-2,25 N•m (steam- and electric-heated units).

6. Floor under unit is a noncombustible surface.
7. Wall behind unit is a noncombustible surface.
8. Always follow local electrical codes and safety-related work practices for wiring. Wire gauge should be appropriated to the rating of the disconnect switch.

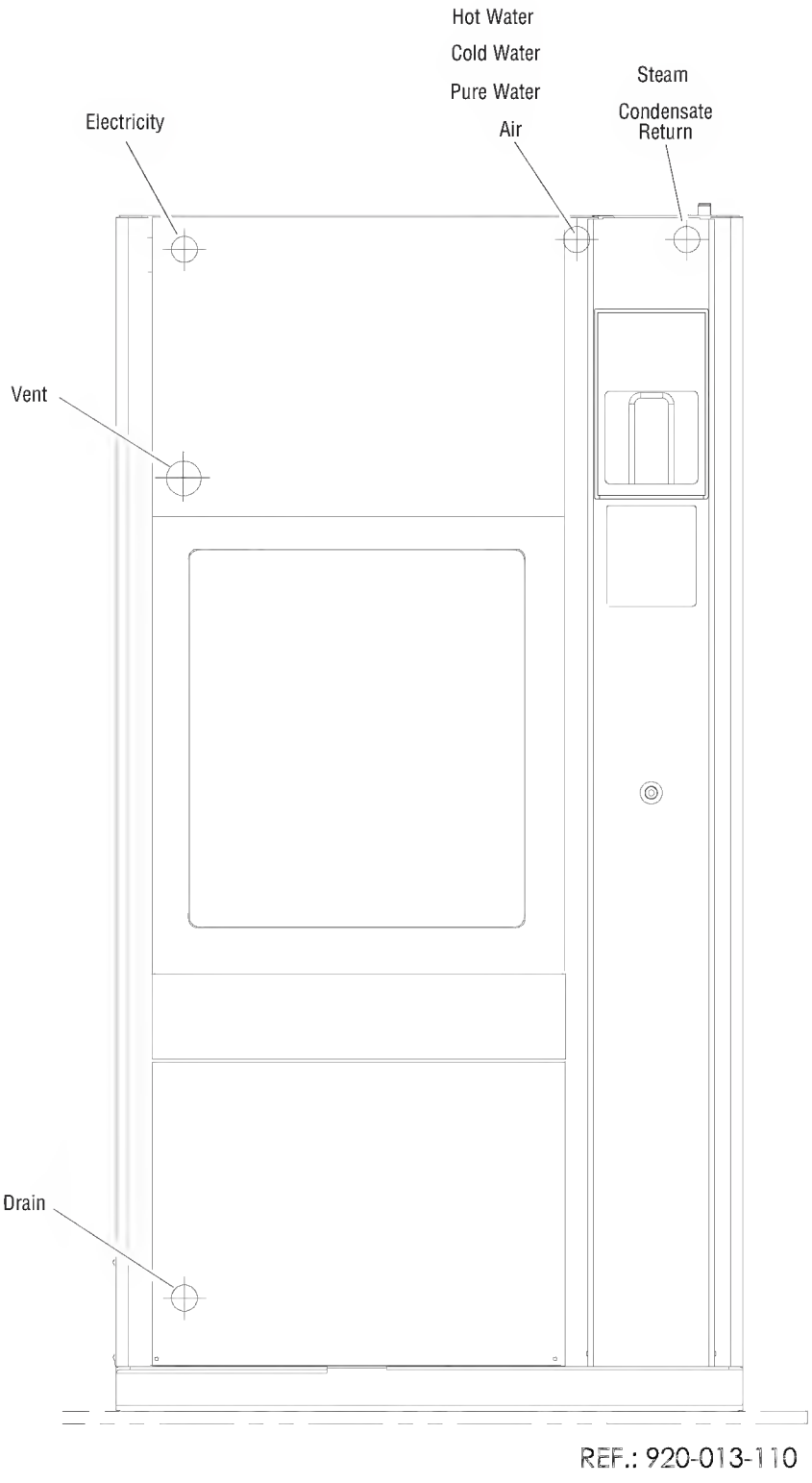


Figure 3-1. Top Utility Connections

Connect Utilities

⚠ CAUTION: After utilities are connected to unit, slowly remove the protective adhesive paper from the exterior cabinet panels to reduce the level of static discharge.

⚠ CAUTION: When removing adhesives from stainless steel, use a small amount of non-flammable cleaning solvent. Rub in a back-and-forth motion (in same direction as surface grain). Solvent rubbed in a circular motion or applied with a wire brush or steel wool on door and chamber assemblies can be harmful to stainless steel. Do not use solvents on painted surfaces.

1. Make sure unit is placed, as shown on Equipment Drawing, in correct relation to building supply lines. If unit is not at installation site, refer to Uncrating Instructions (Section 2) for proper moving instructions.
2. Check that unit is level.
   a. Place a spirit level on loading rack inside wash chamber.
   b. Level unit, end-to-end and side-to-side, using leveling legs located at base of unit.
3. Once unit is level, it can be secured to floor. Install anchoring pins into four internal corners at base of unit.
4. Open lower service access door.
5. Remove bolt, located on bottom left-hand side of unit, securing contactor box to unit frame.
6. Pivot contactor box outward to access the lower utility connections (see Figure 2-2).

NOTE: For better access, disconnect electrical connections from contactor box, lift box off hinges, and set aside.

7. Connect the following building supply lines to the unit (see Figure 3-1).
   - DRAIN - Connect building waste line to unit drain line, accessible from lower service compartment.
   - HOT WATER - Blow out the building hot water supply line to remove chips, scale, etc. Connect line to unit connection.

NOTE: Water is hot; run water line to a safe sink or drain.

   - COLD WATER - Blow out the building cold water supply line to remove chips, scale, etc. Connect line to unit connection.
   - STEAM (required on Steam-Heated units only) - Blow out the building steam supply line to remove chips, scale, etc. Connect line to unit connection.

NOTE: Live steam; run steam line to a safe drain.

   - CONDENSATE RETURN (required on Steam-Heated units only) - Connect building condensate return line to unit connection. Condensate return must be vented and non-pressurized.
   - VENT - Connect building ventilation system to unit vent connection.
   - PURE WATER - Connect building supply line to unit connection.
   - AIR - Connect building supply line to unit connection.
   - ELECTRICITY - Connect building electrical supply to unit electrical supply box. Verify tight electrical connections.
8. Open building supply valves and check for leaks. Correct if necessary.

Cleanup

1. Close and lock lower service access door.
2. Remove all protective paper from the unit cabinet panels. Slowly peel paper away from stainless steel to reduce the level of static discharge.
3. Manually open doors as previously explained in Section 2, if necessary.
4. Remove any adhesive found on panels, door(s), and inside chamber with a small amount of non-flammable cleaning solvent. Keep solvent away from all painted surfaces or damage may result.
5. Inspect unit and work area to be sure all materials used during installation have been removed.

THIS COMPLETES THE INSTALLATION. Before operating the equipment, Installation Checklist (Section 4) and Operational Test (Section 5) should be conducted by a qualified service technician.

INSTALLATION CHECKLIST

4

Installation checklist must be completed after the unit is installed and prior to performing the operational test to assure complete and correct installation.

NOTE: Contact your STERIS representative to schedule a technician to test your installation and demonstrate proper equipment operation.

❑ Shutoff valves (not by STERIS), for maintenance purposes and capable of being locked in OFF position only, installed on steam, air, and water lines and in compliance with local occupational health and safety regulations, as well as electric and plumbing codes for any special requirements that may pertain to installation of this unit.

❑ Disconnect switches (not by STERIS), capable of being locked in OFF position only, installed in electrical supply lines near the unit and in compliance with local occupational health and safety regulations, as well as electric and plumbing codes for any special requirements that may pertain to installation of this unit.

NOTE: If unit is installed next to other equipment, shutoff valves and disconnect switches should be located so that service can be shut off to one piece of equipment at a time.

❑ Unit positioned, as shown on Equipment Drawing, with required clearance space and in relation to building supply lines.

❑ Unit is level. Use leveling legs if necessary.

❑ Building cold water line supplies water to unit as specified on Equipment Drawing.

❑ Building hot water line supplies water to unit as specified on Equipment Drawing.

❑ Building steam line provides steam to unit as specified on Equipment Drawing (required on Steam-Heated units only).

❑ Building condensate return line is connected to unit as specified on Equipment Drawing (required on Steam-Heated units only).

❑ Pure water line supplies water to unit as specified on Equipment Drawing.

❑ Building air line supplies air to unit as specified on Equipment Drawing.

❑ Building waste line is connected to unit as specified on Equipment Drawing.

❑ Building ventilation system is connected to unit as specified on Equipment Drawing.

❑ Electrical supply for unit is as specified on Equipment Drawing.

❑ Pressure for air, water, and steam supplies is within range specified on Equipment Drawing.

❑ Floor surrounding unit has nonslip surface.

IMPORTANT: After a few weeks of operation, inspect unit for leaks. Retighten all clamps and connections.

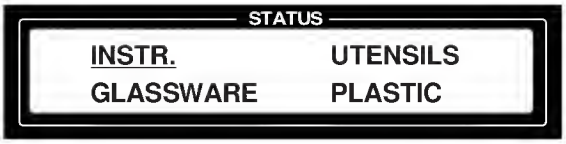
Test Procedure

Test procedures included in this section should be performed by a STERIS-trained service technician prior to normal operation of the equipment.

1. Open building supply valves.
2. On load side, remove upper service compartment (see Figure 2-2). Make sure Main Power switch, is in **OFF** position.
3. Set **POWER-OFF/STANDBY** switch, located behind printer door, to **POWER** (see Figure 5-1).
4. Restore disconnect switch to **ON** position.
5. Turn Main Power switch, located in upper service compartment (see Figure 2-2), to **ON** position. Display shows:

then:

Verify that model name temporarily appears on the display screen. Display shows the first cycle menu screen:



___Indicates flashing position.

6. Check that the printer records:

```
POWER FAIL          HH:MM:SS
                    YY/MM/DD

RELIANCE
MODEL 444
S/N  00000000
```

*NOTE: If incorrect time and date are printed, refer to **Operator Manual** (P-920012-042), Section 5, "Changing Miscellaneous Values", 'Setting Date and Time' for instructions on adjusting time and date.*

7. Check that Time and Date on Independent Cycle Monitor are correct. Adjust if necessary. Refer to **Operator Manual** (P-920012-042) Section 5, "Programming Independent Monitor," 'Time and Date' for instructions on adjusting Time and Date.

IMPORTANT: Independent Monitor Access Code is 2030.

8. On load side, press **DOOR OPEN** touch pad. Display shows:

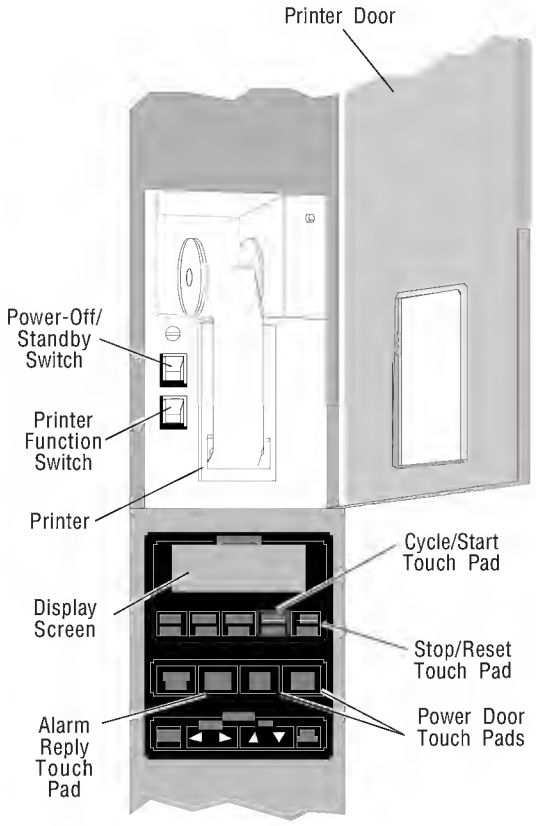


Figure 5-1. Load-side Controls and Printer

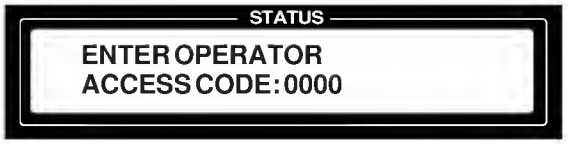
⚠ WARNING - BURN HAZARD: Except for emergency, do not open door when cycle is in progress. In an emergency, first stop cycle by pressing the STOP/RESET touch pad and wait for water flow to stop. Wear protective gloves and face shield whenever reaching into chamber.

⚠ WARNING - BURN HAZARD: When checking the automatic stop feature, wear gloves and face protection and open chamber door slowly. Hot water/steam may be sprayed through door opening if door is opened during a cycle.

⚠ WARNING - FALL HAZARD: To prevent falls, keep floors dry. Promptly clean up any spills or drippage.

⚠ WARNING - ELECTRICAL SHOCK HAZARD: Fasteners and star washers are used to ensure protective bonding continuity. Always reinstall any star washer which may have been removed during installation or servicing.

9. Use **VALUE** (up or down) touch pad to select: YES.
10. Press CHANGE VALUES touch pad. Display shows:



11. Press **CHANGE VALUES** touch pad.
12. Check that debris screens are positioned in wash chamber sump.
13. Remove nylon straps securing rotary spray arm assembly at top of wash chamber.
14. Remove tape securing debris screens and manifold connector in bottom of wash chamber (sump).
15. Check that wash chamber is empty and all packing material (tape and nylon straps) has been removed.
16. Remove inlet sliding and remove three set screws and washer securing manifold connector in position. Remove manifold connector and bottom rotary spray arm assembly from wash chamber.
17. Unscrew rotary spray holder and lower the rotary spray arm assembly from top of wash chamber. Remove rotary spray arm assembly from chamber.

NOTE: There are two loose bushings between the rotary spray hub and top of wash chamber. When lowering rotary spray arm assembly, bushings will fall. Be sure to hold onto bushings while removing and lowering rotary spray arm assembly.

18. Press **DOOR CLOSE** touch pad.
19. Press **CYCLE/START** touch pad once to select the **INSTR** cycle. Verify name of selected cycle appears on display screen.

*NOTE: Pressing **CYCLE/START** once will select the cycle corresponding to the cycle name flashing on the display screen.*

20. Press **CYCLE/START** touch pad a second time to start the selected cycle.

*NOTE: If **CYCLE/START** is not pressed a second time while the selected cycle name is displayed, screen automatically returns to the cycle menu.*

21. Once chamber sump is filled with water, check rotation of the recirculation pump as follows:

⚠ WARNING - FALL HAZARD: To prevent falls, keep floors dry. Promptly clean up any spills or drippage.

⚠ CAUTION: Once three-phase power is connected, check pump for correct rotation (indicated by arrow on pump motor). Incorrect pump rotation may result in pump damage and improper cleaning action.

⚠ CAUTION: Before operating unit, always position each manifold or accessory header over a manifold connector. If manifolds or accessory headers are not positioned correctly, damage may result and unit will be unable to effectively wash loads.

a. Remove lower service access panel on load and on unload sides.

b. From load side, note the direction of the arrow on the motor housing. Motor should turn in that direction.

c. On unload side, press the **CYCLE/START**, then, press **STOP/RESET** touch pads to verify if motor shaft is rotating in direction indicated by the arrow on the motor housing.

d. If pump is rotating in the wrong direction, turn Main Power Switch to **OFF.** Position main disconnect switch to **OFF**.

e. On Main Electric Box, reverse L1 and L2 3-phase wires and recheck shaft rotation.

f. Restore main disconnect switch to **ON**.

g. Turn Main Power Switch to ON position. Control will go through initializing sequence.

h. Press **CYCLE START**. Repeat steps b and c. If pump rotates in the right direction, allow cycle to run for 1 min. Press **STOP/RESET** twice to abort cycle.

22. On load side, press **DOOR OPEN** touch pad. Display shows:

23. Use VALUE (up or down) touch pad to select: YES.

24. Press CHANGE VALUES touch pad. Display shows:

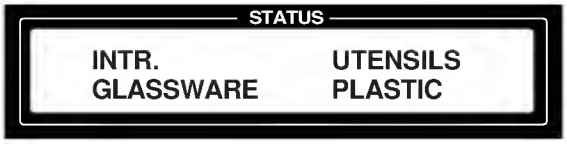
25. Press **CHANGE VALUES** touch pad.

26. On load side, press **EMERGENCY STOP BUTTON**. Interior light and control turn **OFF**. Water is drained from washer.

27. Release **EMERGENCY STOP BUTTON**. Interior light is **ON**, Control starts. Display shows:

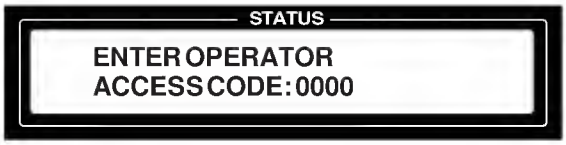
then..

followed by the first cycle menu screen:



28. From unload side, repeat steps 26 to 27.
29. On load side, press **DOOR OPEN** touch pad. Display shows:

30. Use **VALUE** (up or down) touch pad to select: YES.
31. Press **CHANGE VALUES** touch pad. Display shows:



32. Press **CHANGE VALUES** touch pad.
33. Place bushings on top of rotary spray hub and reattach rotary spray arm assembly to top of wash chamber.
34. Replace bottom rotary spray arm assembly and manifold connector. Replace three set screws previously removed.
35. Remove and clean debris screens under running water. Replace screens in chamber sump.
36. Insert empty manifold or accessory headers into wash chamber.
37. Close chamber door and press **CYCLE/START** touch pad to resume cycle operation.
38. Inspect piping, in upper and lower service compartments, for leaks. If any leaks occur, tighten appropriate hose clamp connections and unions.
39. Allow cycle to run to completion. Use the **Operator Manual** (P-920012-042) to verify proper unit and cycle operation.
40. On unload side, check that alarm buzzer sounds and that the following operator instruction appears on display screen once cycle is complete:

41. Open chamber door and allow chamber and accessories to cool before unloading. Verify display screen returns to the first cycle menu once door is opened.
42. Remove screens from utility supply-line strainers and check for debris. Clean screens if necessary.
43. Reinstall all service panels.

» Dip Switches Settings

1. Lock unit electrical disconnect switch to OFF position.
2. Position Main Power switch (located outside Electrical supply box) to OFF and position Printer **POWER OFF/STANDBY** switch to OFF.
3. Open Control front panel.
4. Using one hand to support the control assembly, remove the two hex socket screws (upper right and upper left) holding it in place.
5. Carefully lower control assembly forward and downward until unit stops in a horizontal position. Stops are provided to support the control in position.
6. Locate dip switch SW1 on Control PC Board (see Figure 5-2).
7. Make the appropriate settings on the DIP switches. See Table 5-1.

Table 5-1. Dip Switches Settings

Control PC Board

Dip Switch	Setting
1	OFF
2	OFF
3	OFF
4	OFF
5	OFF
6	ON (Indep. Cycle Monitor Alarm Messages Activated)
	OFF (Indep. Cycle Monitor Alarm Messages Deactivated)
N.B.	Default Dip Switch Settings: 1-2-3-4-5 = OFF 6 = ON

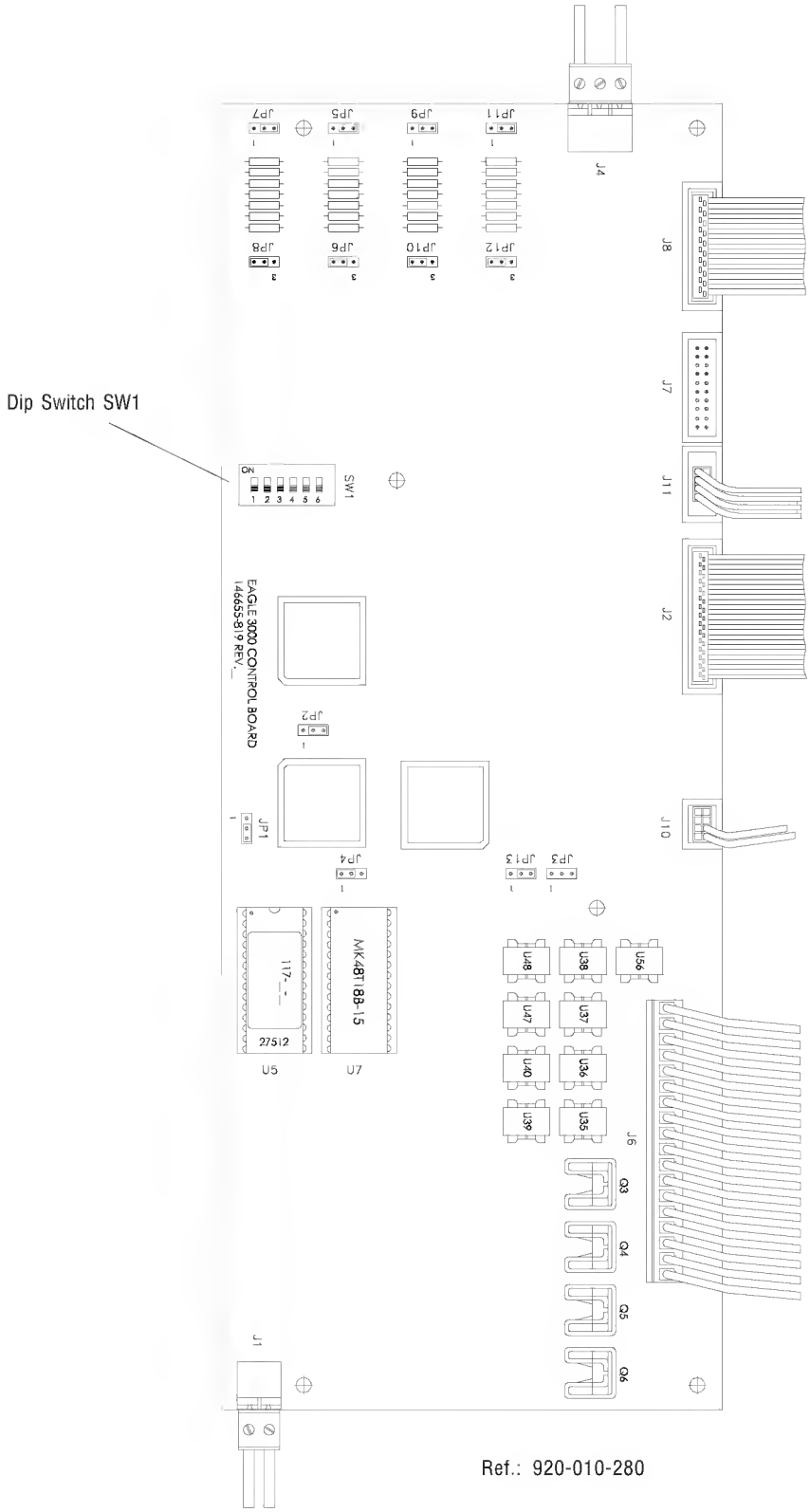


Figure 5-2. Control PC Board Jumper Setting

Start-up Procedure for Independent Monitor

NOTE: Access to monitor PROG or FUNC menus is protected by a pass code. Only authorized persons or a qualified technician may have access to them.

IMPORTANT: Independent Monitor Access Code is 2030.

1. Insert a virgin disk into Independent Monitor.

IMPORTANT: Use good quality floppy disks only.

2. Format the disk. Refer to **Operator Manual** (P-920012-042) Section 5, "Floppy Disk," 'Formatting a Floppy Disk' for instructions to format a disk.

NOTE: Never remove a disk from the drive while the drive light is on.

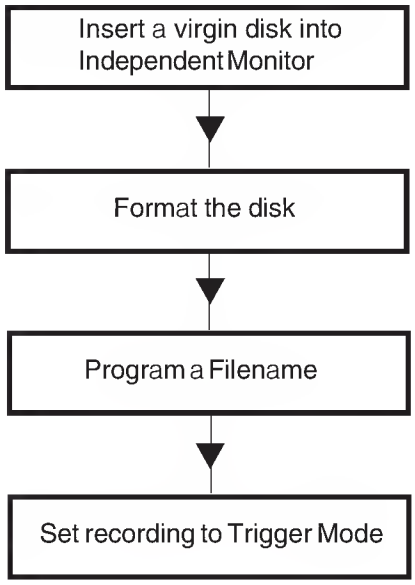
3. Program a File name. Refer to Operator Manual (P-920012-042) Section 5 "Floppy Disk," 'Programming a Filename.'
4. Set the Independent Monitor to Trigger Mode. Refer to **Operator Manual** (P-920012-042) Section 5 "Floppy Disk," 'Starting Data Recording.'
5. Press **CYCLE START** and allow cycle to run to completion.
6. To verify if independent monitor has recorded the information, remove floppy disk. Refer to Section 5, "Floppy Disk," 'Starting Data Recording.'
7. Remove floppy disk and verify if information was recorded.
8. Refer to **Operator Manual** (P-920012-042) for procedure to visualize information on a PC.
9. Insert a virgin disk. Follow steps 1 to 3.
10. Call Department Supervisor or authorized person to communicate passcode on independent monitor.

NOTE: We suggest to keep the same factory-set passcode.

IMPORTANT: Keep your passcodes safe. If you lose them, there is NO WAY to clear or reset them.

12. If unit is automated (Load/Unload Modules), refer to **Uncrating/Installation Instructions Manual** (P-122994-142) to install conveyor modules.

Independent Monitor Start-Up Flowchart



This unit is now ready for a thorough System Field Test, Calibration, and a first-time Preventive Maintenance Checklist Inspection by a qualified STERIS service representative. Contact your STERIS Service Representative for availability and information on this service. Refer to the **Maintenance Manual** (P-764330-313) for further details on these procedures.

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